

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO	Э.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,351 09/22/2003		09/22/2003	Norbertus Josephus Martinus Van De Nieuwelaar	081468-0305843	4924
909	7590	09/03/2004		EXAMINER	
PILLSBU	JRY WIN	NTHROP, LLP	MATHEWS, ALAN A		
P.O. BOX 10500 MCLEAN, VA 22102				ART UNIT PAPER NUMBER	
MOZZIII, VII				2851	
				DATE MAILED: 09/03/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

		~ ~
	Application No.	Applicant(s)
Office Action Summary	10/665,351	VAN DE NIEUWELAAR, NORBERTUS JOSEPHUS M
	Examiner	Art Unit
THE MAN INO DATE of this communication	Alan A. Mathews	2851
The MAILING DATE of this communication a Period for Reply	ppears on the cover sheet with the	corresponaence adaress
A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a release of the period for reply is specified above, the maximum statutory perions are period for reply within the set or extended period for reply will, by state the period for reply will, by state and preply received by the Office later than three months after the main earned patent term adjustment. See 37 CFR 1.704(b).	N. 1.136(a). In no event, however, may a reply be tile eply within the statutory minimum of thirty (30) day by will apply and will expire SIX (6) MONTHS from ute, cause the application to become ABANDONE	mely filed ys will be considered timely. In the mailing date of this communication. ED (35 U.S.C. § 133).
Status		
1)☐ Responsive to communication(s) filed on 2a)☐ This action is FINAL. 2b)☒ Th 3)☐ Since this application is in condition for allow closed in accordance with the practice under	nis action is non-final. vance except for formal matters, pr	
Disposition of Claims		
4) ☐ Claim(s) 1-17 is/are pending in the application 4a) Of the above claim(s) is/are withdrest is/are withdrest is/are allowed. 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-17 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and	rawn from consideration.	
Application Papers		
9) The specification is objected to by the Examination The drawing(s) filed on is/are: a) and a specificant may not request that any objection to the Replacement drawing sheet(s) including the correction. 11) The oath or declaration is objected to by the least of the specific specifi	ccepted or b) objected to by the ne drawing(s) be held in abeyance. Se ection is required if the drawing(s) is ob	e 37 CFR 1.85(a). ojected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
a) All b) Some * c) None of: 1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority docume application from the International Bure * See the attached detailed Office action for a list	ents have been received. Ints have been received in Applicate iority documents have been receive au (PCT Rule 17.2(a)).	ion No ed in this National Stage
Attachment(s)		
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0-Paper No(s)/Mail Date 8-26-04. 	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	

Art Unit: 2851

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1 17 are rejected under 35 U.S.C. 102(b) as being anticipated by the European patent document EP 1041357 A1 (cited on Applicant's PTO-1449). Figure 4 discloses a substrate table WST at a measuring station, which would be a first station (see column 19, lines 39-57), and column 23, lines 35-53). Figure 2 discloses an exposure region 12, which would be a second station at which the substrate may be exposed. Figure 5 discloses a radiation system with an exposure station and a measuring station (see column 23, lines 35-55). Displacement measuring system includes interferometers 87X1, 87X2, 87Y1, 87Y2, 87Y3, 87Y4, and 87Y5 (see figure 7). A substrate transfer device includes 93A, 93B, 93C, and 93D. Figure 5 further discloses a projection system including elements 56, 60, 66, 68, and PL1 which projections a patterning beam from reticle R1 onto a substrate at the second station. With respect to claim 4, figure 5 discloses an alignment system 88A and 88B. Element 38 in figure 5 is a controller, which would have the necessary storage and would have a computer program to execute control of the lithographic projection apparatus. With respect to claims 14-17, it is noted that these are product-by-process claims.

Application/Control Number: 10/665,351

Art Unit: 2851

•

3. Claims 1-3, 5-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Kwan et al (U. S. Patent Application Publication No. 2001/0004105 A1, cited in Applicant's PTO-1449). Figures 1 and 2 disclose a substrate table WTb. The first station is element 30 at which measurement of the substrate may be performed (see page 5, paragraph # 86). The second station is element 20 at which the substrate may be exposed. Displacement measuring system includes interferometers IF in figure 1 and page 4, paragraph # 79, and also includes sensors 173, 174, 175, 183, 184, and 185 (see figure 9 and page 6, paragraph # 97). The table transfer device includes drive elements 120 and 130 (see page 6, paragraph #s 96-100). Figure 1 discloses a radiation system including LA and a support MT for supporting a patterning device MA. The projection system includes PL. With respect to claim 10, paragraph # 98 disclose software control, which means that the device would have memory or storage. With respect to claims 14-17, it is noted that these are product-by-process claims.

Page 3

4. Claims 1-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Lin (U. S. Patent No. 5,715,064). Lin discloses in figure 1 and column 3, lines 36-60, a measuring station 106 and an exposure station 108. Chucks 102 and 104 hold substrates and could be considered tables. Column 5, lines 10-23 disclose a displacement measuring system including interferometers. The projection system includes the lens 112 recited in column 3, line 51. With respect to claim 4, column 4, lines 14-50 disclose alignment. With respect to claims 14-17, it is noted that these are product-by-process claims.

Application/Control Number: 10/665,351 Page 4

Art Unit: 2851

9

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure. The patent to Tanaka is cited to show a measuring station and an exposure station.

The patents on Applicant's PTO 1449 are cited for the same reasons Applicant cited them in his

INFORMATION DISCLOSURE STATEMENT.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Alan A. Mathews whose telephone number is (571) 272-2123.

The examiner can normally be reached on Monday through Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Judy Nguyen can be reached on (571) 272-2258. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Alan A. Mathews Primary Examiner

Celan a Malkens

Art Unit 2851

AM